
IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method comprising:
providing a semiconductor substrate that includes a memory container including [having]
a double-sided capacitor; and
vapor phase etching a layer adjacent to the a side wall of the memory container with a
vapor including [having] a surface tension lowering agent.
2. (Currently Amended) The method of claim 1, wherein the vapor phase etching ~~the layer~~
~~adjacent to the side wall of the memory container with the vapor having the surface tension~~
~~lowering agent~~ comprises vapor phase etching the layer adjacent to the side wall of the memory
container with the vapor including [having] a carboxylic.
3. (Canceled)
4. (Currently Amended) The method of claim 1, wherein the vapor phase etching ~~the layer~~
~~adjacent to the side wall of the memory container with the vapor having the surface tension~~
~~lowering agent~~ comprises vapor phase etching an oxide layer adjacent to the side wall of the
memory container.
5. (Currently Amended) The method of claim 1, wherein the vapor phase etching ~~the layer~~
~~adjacent to the side wall of the memory container with the vapor having the surface tension~~
~~lowering agent~~ comprises vapor phase etching a borophosphosilicate glass (BPSG) material
adjacent to the side wall of the memory container.

6. (Currently Amended) The method of claim 1, wherein the vapor phase etching ~~the layer adjacent to the side wall of the memory container with the vapor having the surface tension lowering agent~~ comprises vapor phase etching the layer adjacent to the side wall of the memory container with the vapor including [having] hydrogen fluoride and an etch initiator composition.

7. (Currently Amended) A method comprising:
providing a semiconductor substrate that includes a double-sided capacitor memory container; and
etching a layer adjacent to a side wall of the double-sided capacitor memory container with [a] vapor comprising vapor for reducing surface tension that includes methanol.

8. (Currently Amended) The method of claim 7, wherein the etching ~~the layer adjacent to the side wall of the double-sided capacitor memory container with the vapor that includes methanol~~ comprises etching an insulator layer adjacent to the side wall of the double-sided capacitor memory container with the vapor comprising vapor for reducing surface tension that includes methanol.

9. (Currently Amended) The method of claim 7, wherein the etching ~~the layer adjacent to the side wall of the double-sided capacitor memory container with the vapor that includes methanol~~ comprises etching a doped oxide layer adjacent to the side wall of the double-sided capacitor memory container with the vapor comprising vapor for reducing surface tension that includes methanol.

10. (Currently Amended) The method of claim 7, wherein the etching ~~the layer adjacent to the side wall of the double-sided capacitor memory container with the vapor that includes methanol~~ comprises etching an insulator layer adjacent to the side wall of the double-sided

capacitor memory container with the vapor comprising vapor for reducing surface tension that includes hydrogen [fluoride] fluoride.

11. (Currently Amended) A method of fabricating a semiconductor circuit element [substrate], the method comprising:

placing a semiconductor substrate that includes a double-sided capacitor container in a chamber; and

vapor phase etching a layer adjacent to a side wall of the double-sided capacitor container with a vapor that includes hydrogen [fluoride] fluoride, an etch initiator composition and a surface tension lowering composition that includes an alcohol.

12. (Currently Amended) The method of claim 11, wherein the vapor phase etching ~~the layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, the etch initiator composition and alcohol~~ comprises vapor phase etching an oxide layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, the etch initiator composition and the surface tension lowering composition that includes alcohol.

13. (Currently Amended) The method of claim 11, wherein the vapor phase etching ~~the layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, the etch initiator composition and alcohol~~ comprises vapor phase etching an insulator layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, the etch initiator composition and the surface tension lowering composition that includes alcohol.

14. (Currently Amended) The method of claim 11, wherein the vapor phase etching ~~the layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, the etch initiator composition and alcohol~~ comprises vapor phase etching a layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, the etch initiator composition and the surface tension lowering composition that includes [a] methanol.

15. (Currently Amended) The method of claim 11, wherein the vapor phase etching ~~the layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, the etch initiator composition and alcohol~~ comprises vapor phase etching a layer adjacent to the side wall of the double-sided capacitor container with the vapor that includes hydrogen fluoride, H₂O and the surface tension lowering composition that includes [an] isopropyl alcohol.

16. (Currently Amended) A method of fabricating an integrated circuit, the method comprising:

housing the integrated circuit in a vapor etch chamber; and

vapor phase etching an insulator layer formed adjacent to a double-sided capacitor container in the integrated circuit with a vapor including a surface tension lowering agent, wherein the vapor phase etching of the [oxide] insulator layer comprises inserting a vapor comprised of a hydrogen fluoride and isopropyl alcohol into the vapor etch chamber.

17. (Original) The method of claim 16, further comprising heating the hydrogen fluoride and the isopropyl alcohol prior to inserting the vapor into the vapor etch chamber.

18. (Currently Amended) The method of claim 16, wherein the vapor phase etching ~~the insulator layer formed adjacent to the double-sided capacitor container in the integrated circuit~~ comprises vapor phase etching a doped oxide layer formed adjacent to the double-sided capacitor container in the integrated circuit.

19. (Currently Amended) The method of claim 16, wherein the vapor phase etching ~~the insulator layer formed adjacent to the double-sided capacitor container in the integrated circuit~~ comprises vapor phase etching a borophosphosilicate glass (BPSG) layer formed adjacent to the double-sided capacitor container in the integrated circuit.

20. (Currently Amended) The method of claim 16, wherein the inserting the vapor ~~comprised of hydrogen fluoride and isopropyl alcohol into the vapor etch chamber~~ comprises inserting the vapor comprised of hydrogen fluoride, isopropyl alcohol and an etch initiator composition into the vapor etch chamber.

21. (Currently Amended) A method comprising:
placing a substrate that includes an array of memory into a chamber, the array of memory having at least one memory container with a side wall with an embedded capacitor; and
vapor phase etching of a layer of an insulator material formed adjacent to the side wall, wherein the vapor phase etching comprises:
mixing a hydrogen fluoride with a vapor including a surface tension lowering agent including isopropyl alcohol to form a mixed vapor; and
inserting the mixed vapor into the chamber.

22. (Original) The method of claim 21, further comprising heating the hydrogen fluoride and the isopropyl alcohol prior to inserting the mixed vapor into the vapor etch chamber.

23. (Currently Amended) The method of claim 21, wherein the mixing ~~the hydrogen fluoride and the isopropyl alcohol to form the mixed vapor~~ comprises mixing the hydrogen fluoride, the isopropyl alcohol and an etch initiator composition to form the mixed vapor.

24. (Currently Amended) The method of claim 21, wherein the vapor phase etching ~~of the layer of the insulator material formed adjacent to the side wall~~ comprises vapor phase etching of a layer of oxide formed adjacent to the side wall.

25. (Currently Amended) The method of claim 21, wherein the vapor phase etching ~~of the layer of the insulator material formed adjacent to the side wall~~ comprises vapor phase etching of a layer of silicon dioxide formed adjacent to the side wall.

26. (Currently Amended) A method for fabricating a semiconductor substrate, the method comprising:

placing the semiconductor substrate that includes a memory container into a vapor etching chamber, wherein a side wall of the memory container includes a double-sided capacitor; and

vapor phase etching of a layer of an insulator material formed adjacent to the side wall of the memory container, wherein the vapor phase etching comprises:

mixing an etch initiator composition and surface tension reducing composition including hydrogen fluoride and alcohol to form a mixed vapor;

heating the mixed vapor; and

inserting the mixed vapor into the vapor etching chamber.

27. (Currently Amended) The method of claim 26, wherein the mixing ~~the etch initiator composition and hydrogen fluoride and alcohol to form the mixed vapor~~ comprises mixing the

etch initiator composition and the surface tension reducing composition including hydrogen fluoride and methanol to form the mixed vapor.

28. (Currently Amended) The method of claim 26, wherein the mixing ~~the etch initiator composition and hydrogen fluoride and alcohol to form the mixed vapor~~ comprises mixing the etch initiator composition and the surface tension reducing composition including hydrogen fluoride and isopropyl alcohol to form the mixed vapor

29. (Currently Amended) The method of claim 26, wherein the vapor phase etching ~~of the layer of the insulator material formed adjacent to the side wall of the memory container~~ comprises vapor phase etching of a layer of silicon nitride formed adjacent to the side wall of the memory container.

30. (Currently Amended) The method of claim 26, wherein the vapor phase etching ~~of the layer of the insulator material formed adjacent to the side wall of the memory container~~ comprises vapor phase etching of a layer of silicon oxynitride formed adjacent to the side wall of the memory container.

31. (Original) A method comprising:

placing a semiconductor substrate into a chamber; and

vapor phase etching of an insulator material formed adjacent to a double-sided container on a semiconductor substrate, wherein the vapor phase etching comprises:

forming a vapor that includes an H₂O vapor, an HF gas and a surface tension lowering agent; and

inserting the vapor into the chamber.

32. (Currently Amended) The method of claim 31, wherein the forming ~~the vapor that includes H₂O, hydrogen fluoride and the surface tension lowering agent~~ comprises forming the vapor that includes H₂O, hydrogen fluoride and carboxylic.

33. (Currently Amended) The method of claim 31, wherein the forming ~~the vapor that includes H₂O, hydrogen fluoride and the surface tension lowering agent~~ comprises forming the vapor that includes H₂O, hydrogen fluoride and alcohol.

34. (Currently Amended) The method of claim 31, wherein the forming ~~the vapor that includes H₂O, hydrogen fluoride and the surface tension lowering agent~~ comprises forming the vapor that includes H₂O, hydrogen fluoride and isopropyl alcohol.

35. (Currently Amended) The method of claim 31, wherein the forming ~~the vapor that includes H₂O, hydrogen fluoride and the surface tension lowering agent~~ comprises forming the vapor that includes H₂O, hydrogen fluoride and methanol.

36. (Currently Amended) The method of claim 31, wherein the vapor phase etching ~~of the insulator material formed adjacent to the double-sided container on the semiconductor substrate~~ comprises vapor phase etching of a silicon dioxide material formed adjacent to the double-sided container on the semiconductor substrate.

37. (Currently Amended) The method of claim 31, wherein the vapor phase etching ~~of the insulator material formed adjacent to the double-sided container on the semiconductor substrate~~ comprises vapor phase etching of a doped oxide material formed adjacent to the double-sided container on the semiconductor substrate.

38. (Currently Amended) A method for fabricating a memory array, the method comprising:
forming at least one memory container in a borophosphosilicate glass (BPSG) material on a substrate, wherein a side wall of the at least one memory container includes a double-sided capacitor; and

removing at least a part of the BPSG material based on a vapor wet etch operation with a vapor including a surface tension lowering agent comprising [comprised of] hydrogen fluoride and alcohol.

39. (Currently Amended) The method of claim 38, wherein the removing ~~the at least a part of the BPSG material based on the vapor wet etch operation with the vapor comprised of hydrogen fluoride and alcohol~~ comprises removing the at least a part of the BPSG material based on the vapor wet etch operation with the vapor including a surface tension lowering agent comprising [comprised of] hydrogen fluoride and isopropyl alcohol.

40. (Currently Amended) The method of claim 38, wherein the removing ~~the at least a part of the BPSG material based on the vapor wet etch operation with the vapor comprised of hydrogen fluoride and alcohol~~ comprises removing the at least a part of the BPSG material based on the vapor wet etch operation with the vapor including a surface tension lowering agent comprising [comprised of] hydrogen fluoride and methanol.

41. (Original) A method comprising:

forming at least one memory container in an oxide, wherein a side wall of the at least one memory container includes a double-sided capacitor; and

vapor wet etching of a layer of the oxide with a vapor comprised of hydrogen fluoride, an etch initiator composition and a surface tension lowering agent.

42. (Currently Amended) The method of claim 41, wherein the forming the at least one memory container ~~in the oxide~~ comprises forming the at least one memory container in silicon oxide.

43. (Currently Amended) The method of claim 41, wherein the vapor wet etching ~~of a layer of the oxide with a vapor comprised of hydrogen fluoride, the etch initiator composition and a surface tension lowering agent~~ comprises vapor wet etching ~~of a layer of the oxide~~ with a vapor comprised of hydrogen fluoride, the etch initiator composition and an alcohol.

44. (Currently Amended) The method of claim 41, wherein the vapor wet etching ~~of a layer of the oxide with a vapor comprised of hydrogen fluoride, the etch initiator composition and a surface tension lowering agent~~ comprises vapor wet etching ~~of a layer of the oxide~~ with a vapor comprised of hydrogen fluoride, the etch initiator composition and [an] isopropyl alcohol.

45. (Currently Amended) The method of claim 41, wherein the vapor wet etching ~~of a layer of the oxide with a vapor comprised of hydrogen fluoride, the etch initiator composition and a surface tension lowering agent~~ comprises vapor wet etching ~~of a layer of the oxide~~ with a vapor comprised of hydrogen fluoride, the etch initiator composition and methanol.

46-95. (Canceled)